

REMARKS

This Amendment is responsive to the Office Action mailed June 10, 2004 (the "Action"). At the time of the Action, Claims 6-87 were pending in the application. Claim 88 is new. Support for new Claim 88 can be found, for example, in Figures 1-2 and the accompanying description in the Specification. Applicants submit that the cited art does not teach or suggest, for example, a coincidence laser spectrometer that includes a charged beam steering optic and a voltage programmer flight tube to accelerate or retard the ion beam and consequently interact that ion beam with a co-axial laser system in an optical detector system.

Applicants appreciate the Examiner's indication that Claims 40 and 42-44 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claim 6, from which Claim 40 depended, has been amended to incorporate the subject matter of Claim 40, and therefore, Claim 6 is allowable. Claims 7-26, 29-31, 33-39, 42-46, 48-68, and 70-86 depend directly or indirectly from Claim 6 and are therefore also allowable. Claims 27-28, 32, 40-41, 47, 69, 87 have been cancelled. Various amendments have been made to clarify the dependent claims, for example, in light of the amendment to Claim 6.

Claims 19, 32 and 41 were rejected in the Action under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement thereof. In order to expedite prosecution, Claims 19, 32 and 41 have been canceled. Claims 19, 64 and 86 were rejected in the Action under 35 U.S.C. § 112, second paragraph, as being indefinite. Claim 19 has been canceled. The Action stated that Claims 64 and 86 did not provide antecedent basis for the limitations "the metastable state" and "the laser frequencies." Claims 64 and 86 have been amended to recite "a metastable state" and "a laser frequency." Accordingly, Applicants submit that Claims 64 and 86 satisfy the requirements of § 112 and request an indication of same.

In light of the above amendments and remarks, Applicant submits that the pending claims are in condition for allowance. Accordingly, Applicants respectfully request allowance of the present application and passing the application to issue.

In re: Goodall et al.
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Respectfully submitted,

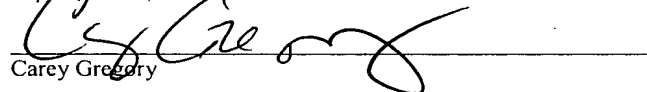


Laura M. Kelley
Registration No. 48,441
Attorney for Applicants

USPTO Customer No. 20792
Myers Bigel Sibley & Sajovec, P.A.
Post Office Box 37428
Raleigh, North Carolina 27627
Telephone: (919) 854-1400
Facsimile: (919) 854-1401

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I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to Mail Stop Amendment, Commissioner for Patents, PO Box 1450, Alexandria, VA 22313-1450, on September 10, 2004.


Carey Gregory